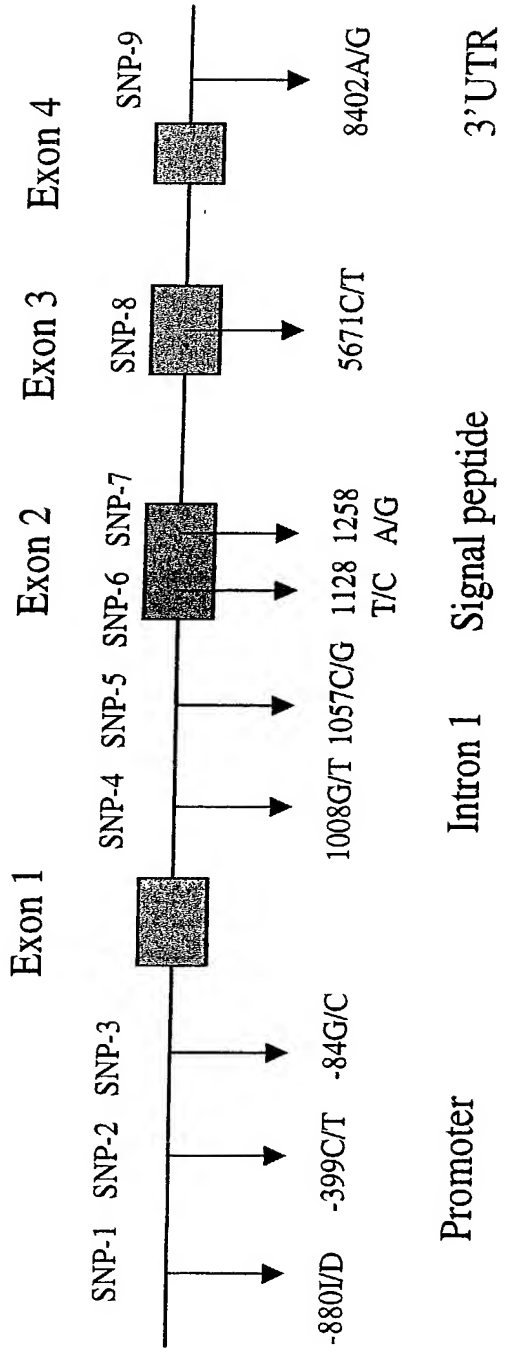

Exon 1
Exon 2
Exon 3
Exon 4
SNP-1
SNP-2
SNP-3
SNP-4
SNP-5
SNP-6
SNP-7
SNP-8
SNP-9
-880I/D
-399C/T
-84G/C
1008G/T
1057C/G
1128 T/C
1258 A/G
5671C/T
8402A/G
Promoter
Intron 1
Signal peptide
3'UTR

Fig. 1

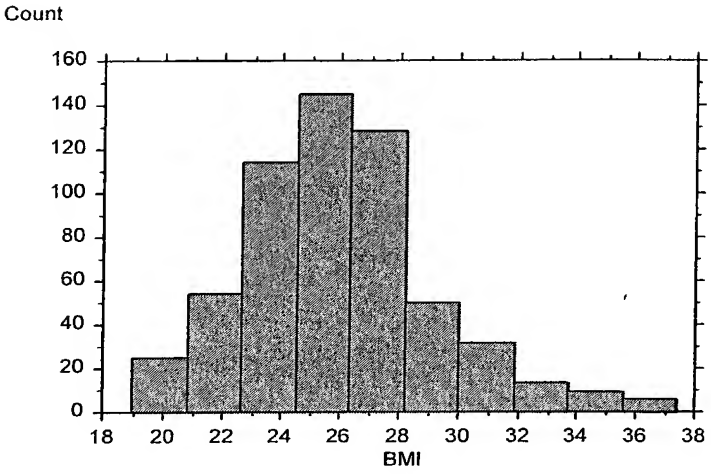
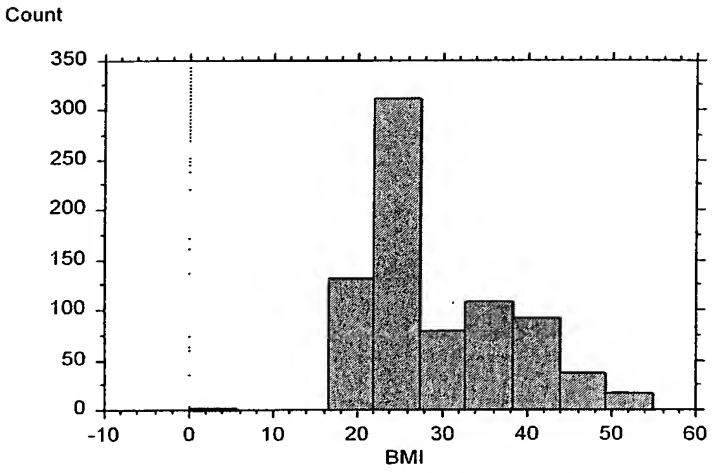

Count
160
140
120
100
80
60
40
20
0
18
20
22
24
26
28
30
32
34
36
38
BMI

Fig. 2A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250
200
150
100
50
0
-10
0
10
20
30
40
50
60
BMI

Fig. 2B

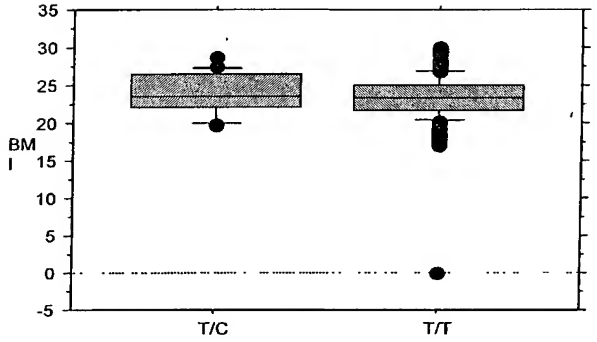


Fig. 3A

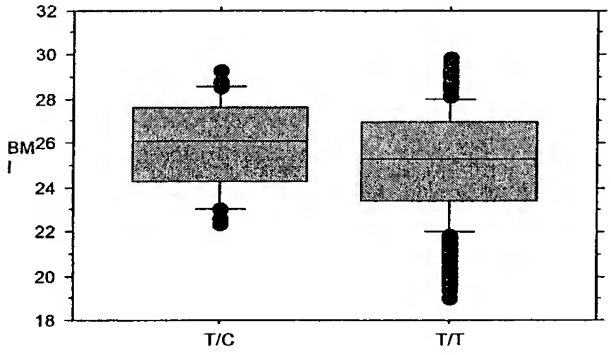


Fig. 3B

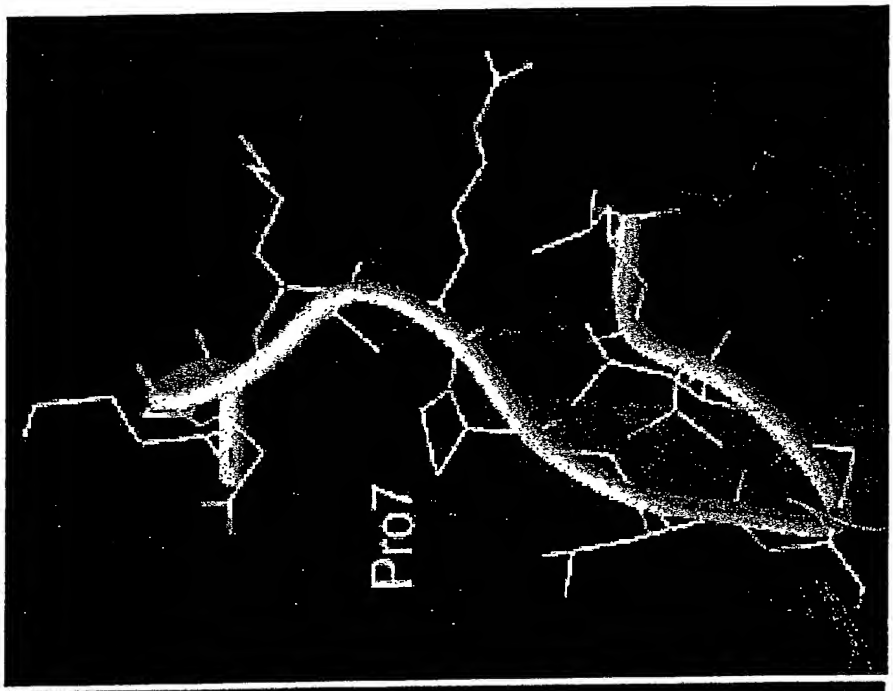


Fig. 4A

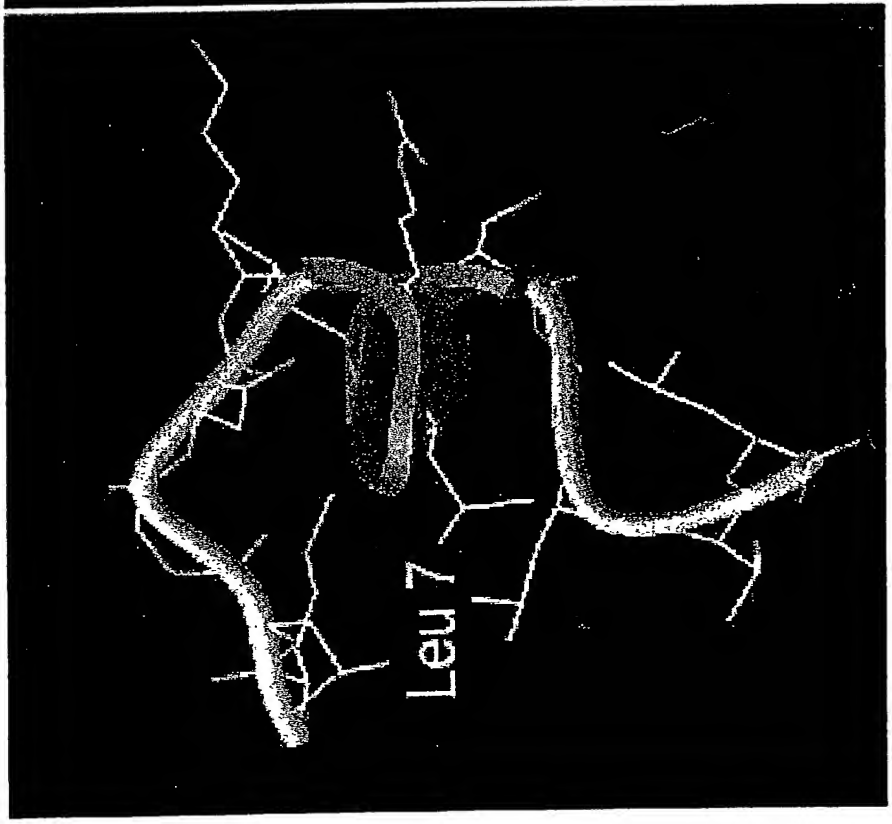


Fig. 4B

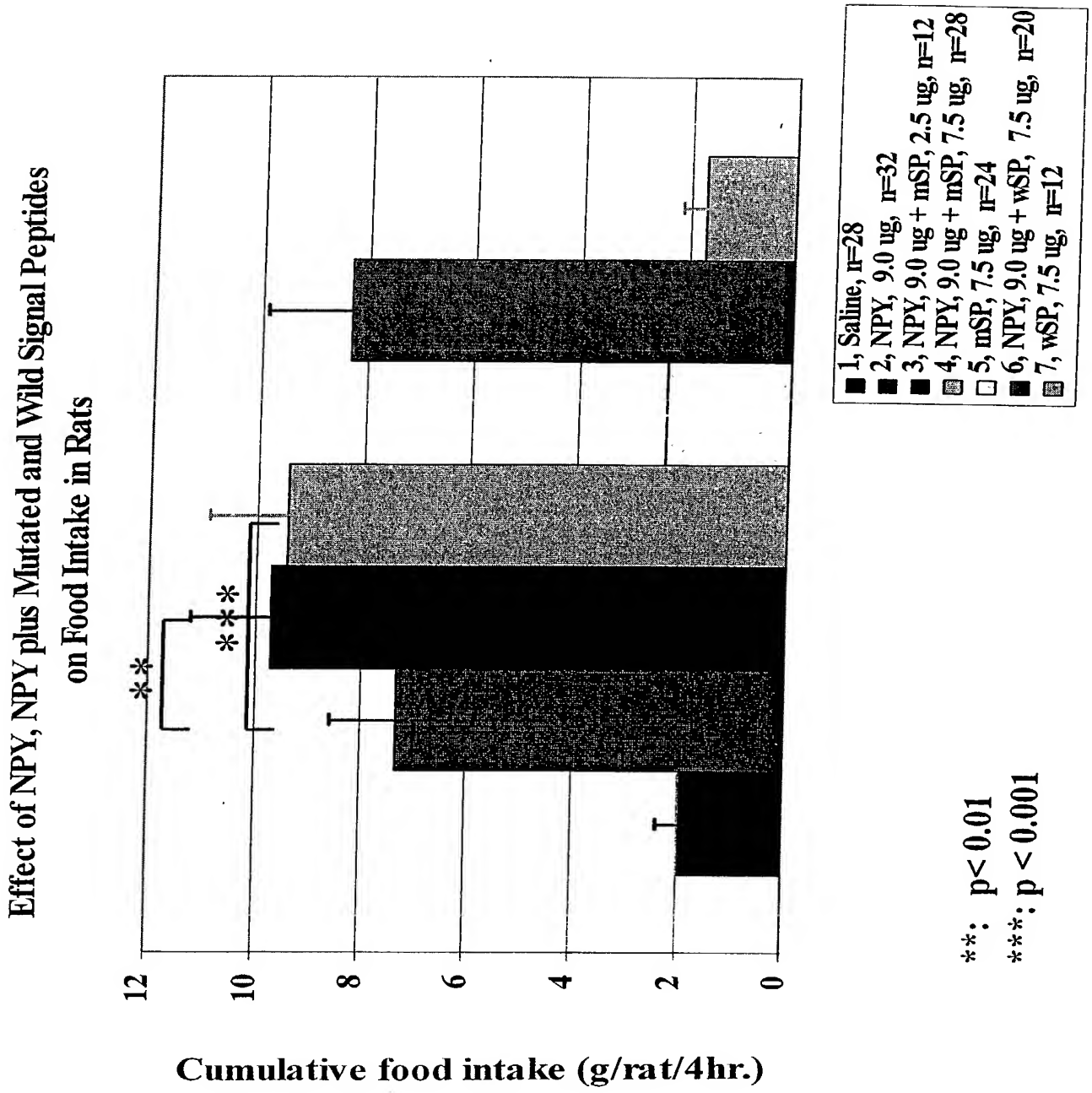

Effect of NPY, NPY plus Mutated and Wild Signal Peptides on Food Intake in Rats
Cumulative food intake (g/rat/4hr.)
0
2
4
6
8
10
12
**
***
1, Saline, n=28
2, NPY, 9.0 ug, n=32
3, NPY, 9.0 ug + mSP, 2.5 ug, n=12
4, NPY, 9.0 ug + mSP, 7.5 ug, n=28
5, mSP, 7.5 ug, n=24
6, NPY, 9.0 ug + wSP, 7.5 ug, n=20
7, wSP, 7.5 ug, n=12
**: p< 0.01
***: p < 0.001

Fig. 5A

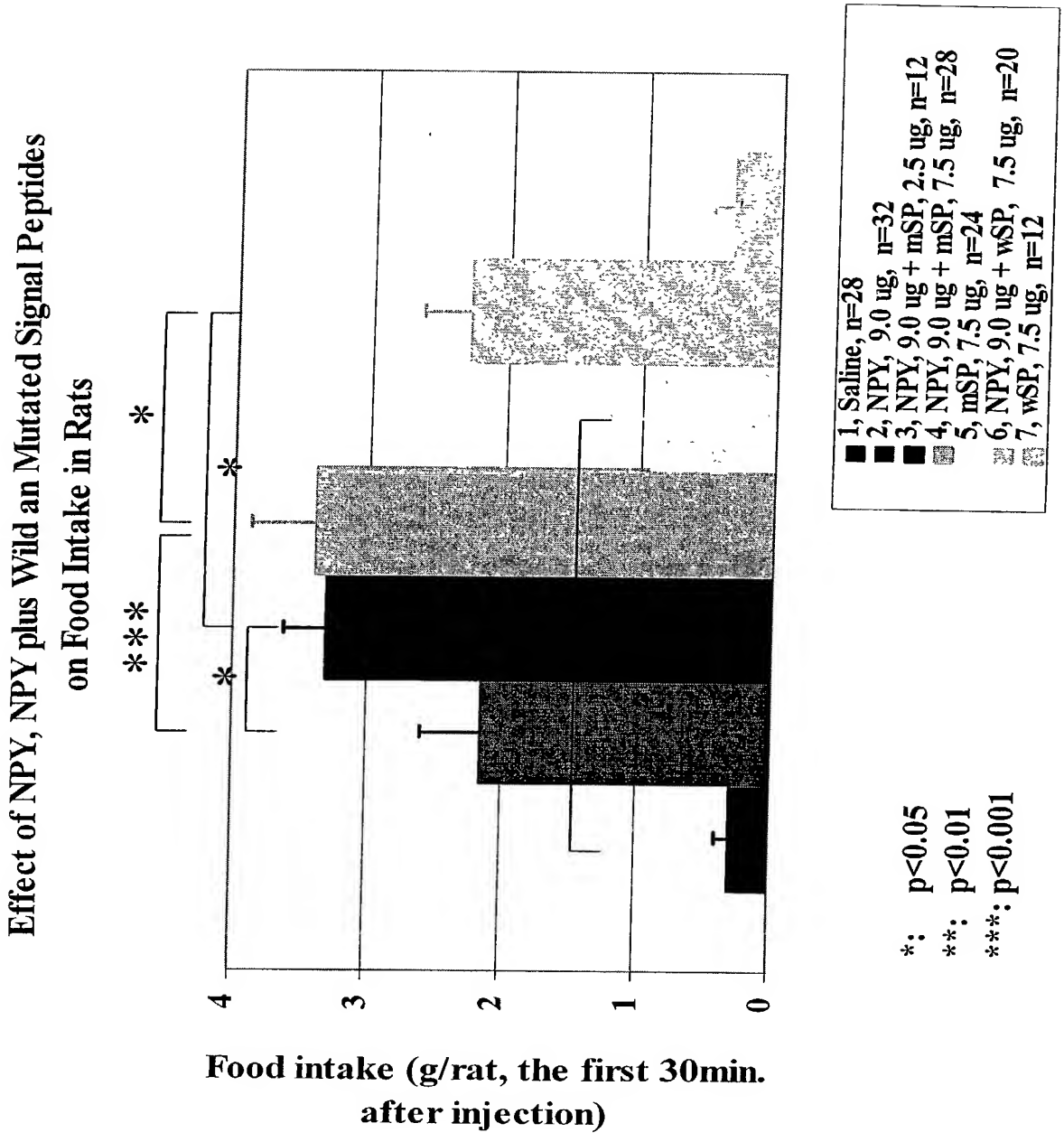

Effect of NPY, NPY plus Wild an Mutated Signal Peptides on Food Intake in Rats
***
*
*
*
1, Saline, n=28
2, NPY, 9.0 ug, n=32
3, NPY, 9.0 ug + mSP, 2.5 ug, n=12
4, NPY, 9.0 ug + mSP, 7.5 ug, n=28
5, mSP, 7.5 ug, n=24
6, NPY, 9.0 ug + wSP, 7.5 ug, n=20
7, wSP, 7.5 ug, n=12
*: p<0.05
**: p<0.01
***: p<0.001
0
1
2
3
4
Food intake (g/rat, the first 30min. after injection)

Fig. 5B

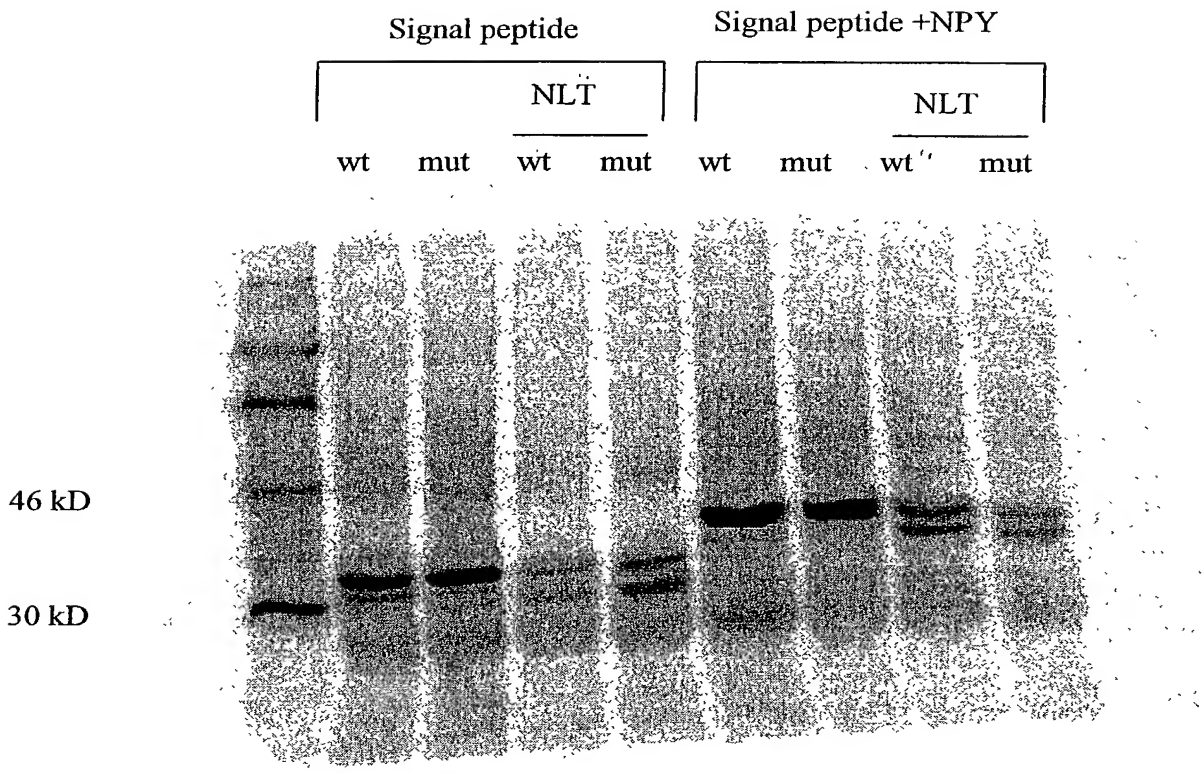
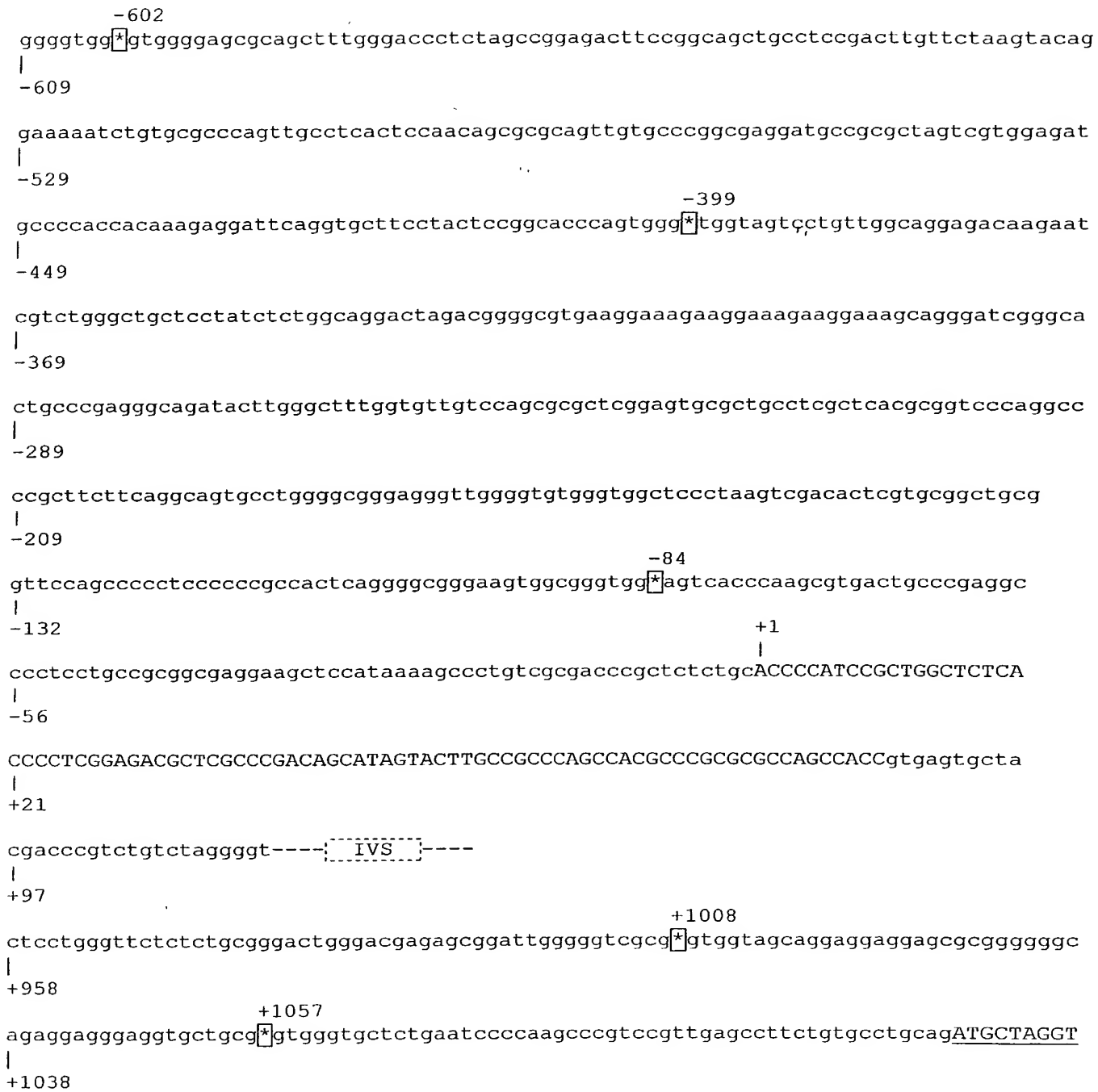

Signal peptide
Signal peptide +NPY
NLT
NLT
wt
mut
wt
mut
wt
mut
wt
mut
46 kD
30 kD

Fig. 6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-84
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-132
+1
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+21
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+97
+1008
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+1038

Fig. 7

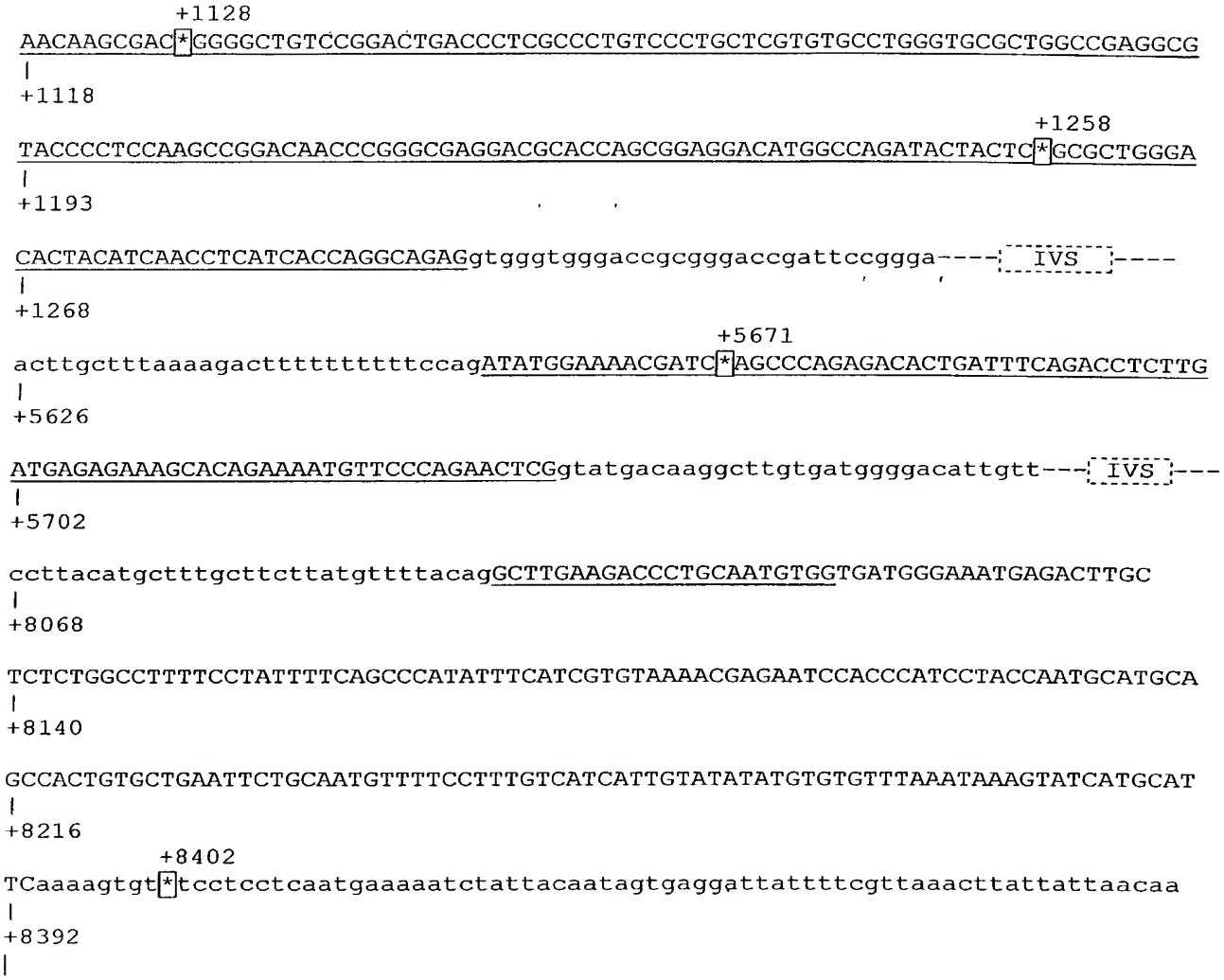

Fig. 7 continued